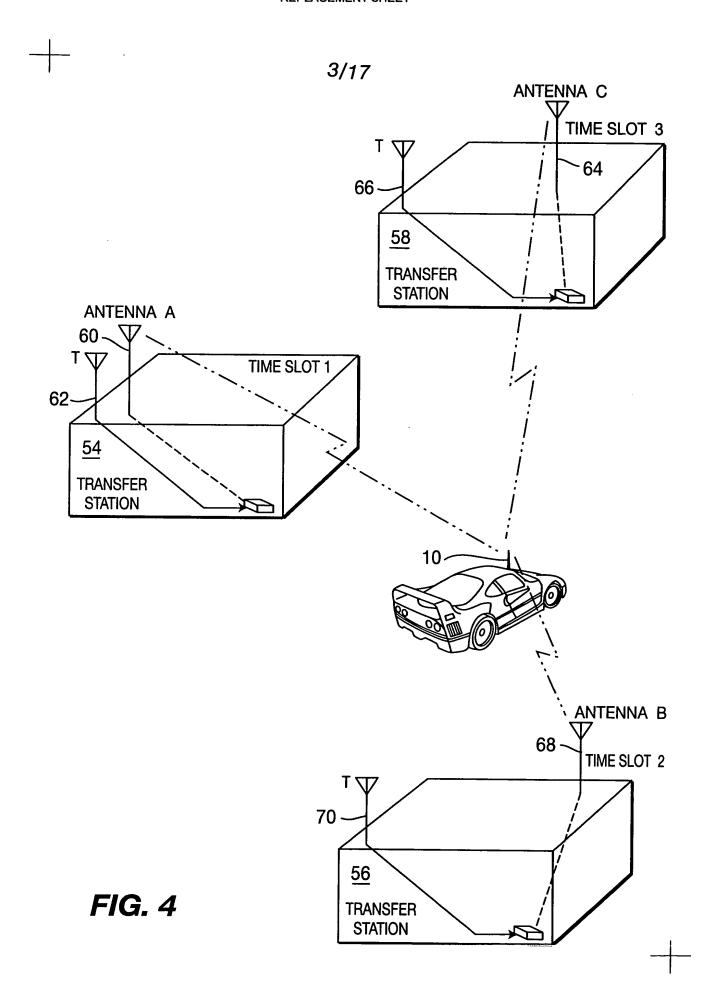


FIG. 3





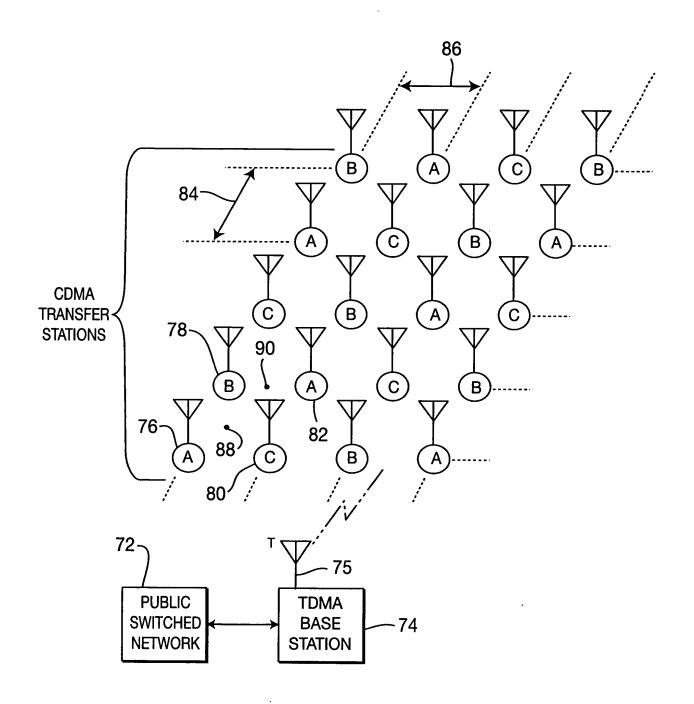


FIG. 5

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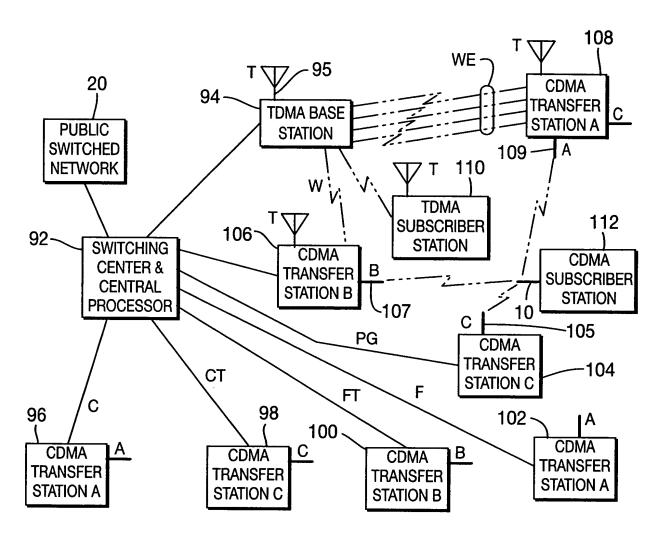
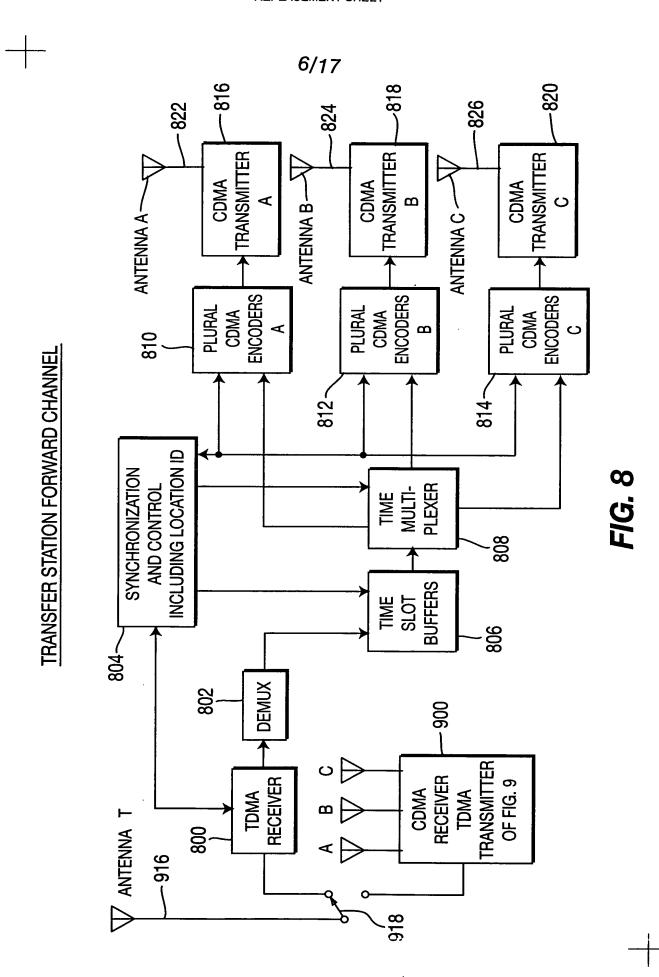
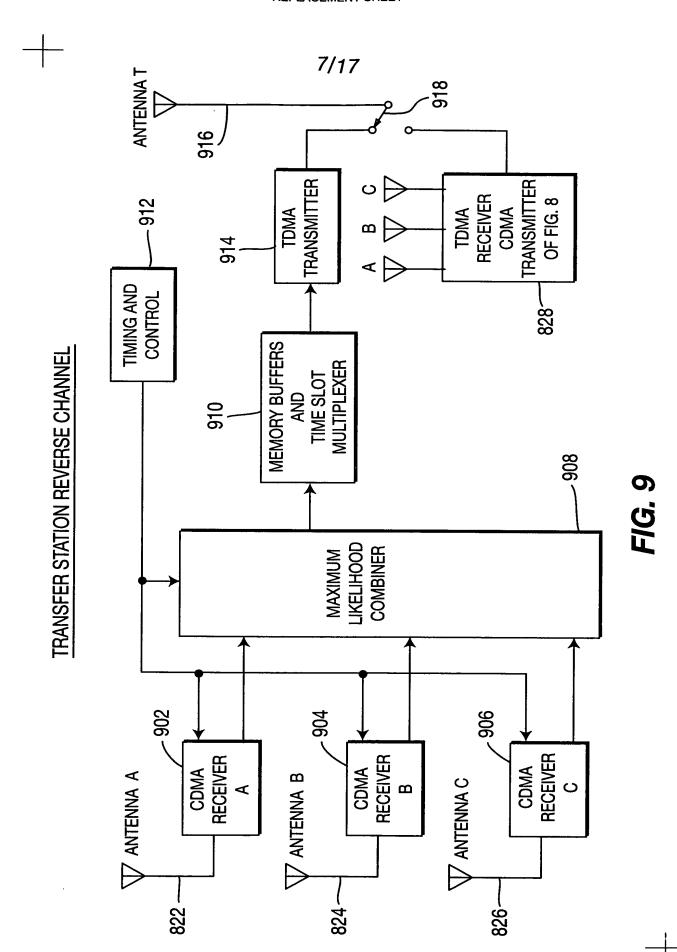


FIG. 6

TIME SLOT	'S 1	2	3	4	5	6
i	RECEIVE	RECEIVE	TRANSMIT	RECEIVE	SCAN	SPARE

FIG. 7





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## FIG. 10A

			/U.						
TRAN	SFER ST	ATION C	DMA OUT	PUT TO	ANTENN	AS (FOR	VARD CH	IANNEL)	
TIME SLOTS	1	2	3	4	5	6	1	2	1002
ANTENNA A	T <sub>1</sub>	T <sub>2</sub>	T <sub>3</sub>	T <sub>4</sub>	T <sub>5</sub>	T <sub>6</sub>	T <sub>1</sub>	T <sub>2</sub>	7)
ANTENNA B	Т6	T <sub>1</sub>	T <sub>2</sub>	T <sub>3</sub>	T <sub>4</sub>	T <sub>5</sub>	Т <sub>6</sub>	T <sub>1</sub>	7
ANTENNA C	T <sub>4</sub>	T <sub>5</sub>	T <sub>6</sub>	T <sub>1</sub>	T <sub>2</sub>	T <sub>3</sub>	T <sub>4</sub>	T <sub>5</sub>	
	FER STA	TION CD	MA INPU	T FROM	ANTENN	AS (REVE	RSE CH	ANNEL)	1004
TIME SLOTS	1	2	3	4	5	6	1	2	1004
ANTENNA A	R <sub>5</sub>	R <sub>6</sub>	R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	R <sub>4</sub>	R <sub>5</sub>	R <sub>6</sub>	] )
ANTENNA B	R <sub>5</sub>	R <sub>6</sub>	R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	R <sub>4</sub>	R <sub>5</sub>	R <sub>6</sub>	1

TX = TRANSMITTER CHANNEL X

**ANTENNA C** 

 $R_5$ 

R<sub>6</sub>

RX = RECEIVER CHANNEL X

R<sub>5</sub>

 $R_4$ 

# FIG. 10B

 $R_2$ 

Rз

R1

										$\overline{}$
TRANSFI	ER STATIO	ON CDM/	A OUTPU	T TO AN	TENNAS	(FORWAF	RD CHAN	NEL)		
TIME SLOTS	1	2	3	4	5	6	1	2	100	)6 \
ANTENNA A	T <sub>1,7</sub>	T <sub>2,8</sub>	T <sub>3,9</sub>	T <sub>4,10</sub>	T <sub>5,11</sub>	T <sub>6,12</sub>	T <sub>1,7</sub>	T <sub>2,8</sub>	] /	
ANTENNA B	T <sub>6,12</sub>	T <sub>1,7</sub>	T <sub>2,8</sub>	T <sub>3,9</sub>	T <sub>4,10</sub>	T <sub>5,11</sub>	T <sub>6,12</sub>	T <sub>1,7</sub>	Y	
ANTENNA C	T <sub>4,10</sub>	T <sub>5,11</sub>	T <sub>6,12</sub>	T <sub>1,7</sub>	T <sub>2,8</sub>	T <sub>3,9</sub>	T <sub>4,10</sub>	T <sub>5,11</sub>		
	.,,	-,	,	.,,.	_,-	0,0	.,.0		ز	

TRANSFER STATION CDMA INPUT FROM ANTENNAS (REVERSE CHANNEL)

TIME SLOTS	1	2	3	. 4	5	6	1	2	1008
ANTENNA A	R <sub>5,11</sub>	R <sub>6,12</sub>	R <sub>1,7</sub>	R <sub>2,8</sub>	R3,9	R <sub>4,10</sub>	R <sub>5,11</sub>	R <sub>6,12</sub>	] /
ANTENNA B	R <sub>5,11</sub>	R <sub>6,12</sub>	R <sub>1,7</sub>	R <sub>2,8</sub>	R3,9	R <sub>4,10</sub>	R <sub>5,11</sub>	R <sub>6,12</sub>	1
ANTENNA C	R <sub>5,11</sub>	R <sub>6,12</sub>	R <sub>1,7</sub>	R <sub>2,8</sub>	R3,9	R <sub>4,10</sub>	R <sub>5,11</sub>	R <sub>6,12</sub>	

T<sub>X</sub> = TRANSMITTER CHANNEL X

R<sub>X</sub> = RECEIVER CHANNEL X

 $T_{x,y}$  = TRANSMITTER CHANNELS X AND Y  $R_{x,y}$  = RECEIVER CHANNELS X AND Y

9/17 **FIG. 11A** 

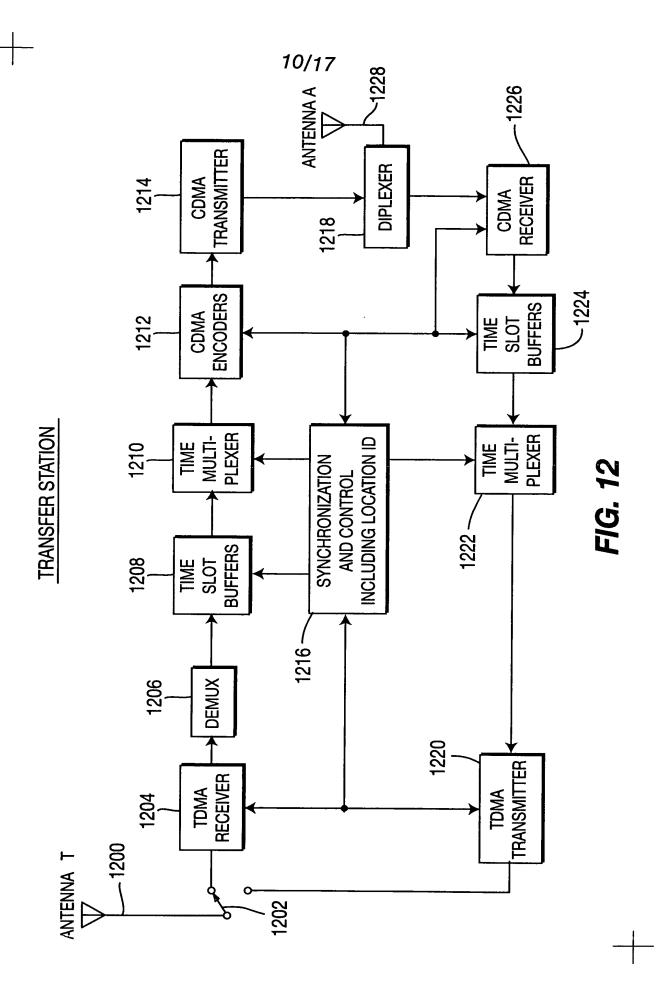
			<b>^</b>					
SFER ST	ATION CI	OMA OU	TPUT TO	ANTENN	IAS (FOR	WARD C	HANNEL	
1	2	3	4	5	6	1	2	
T <sub>1</sub>	T <sub>2</sub>	Тз	T <sub>4</sub>	T <sub>5</sub>	Т <sub>6</sub>	T <sub>1</sub>	T <sub>2</sub>	1102
T <sub>7</sub>	Tg	Tg	T <sub>10</sub>	T <sub>11</sub>	T <sub>12</sub>	T <sub>7</sub>	Тв	)
T <sub>13</sub>	T <sub>14</sub>	T <sub>15</sub>	T <sub>16</sub>	T <sub>17</sub>	T <sub>18</sub>	T <sub>13</sub>	T <sub>14</sub>	
T <sub>19</sub>	T <sub>20</sub>	T <sub>21</sub>	T <sub>22</sub>	T <sub>23</sub>	T <sub>24</sub>	T <sub>19</sub>	T <sub>20</sub>	
1	2	3	4	5	6	1	2	
T <sub>6</sub>	T <sub>1</sub>	T <sub>2</sub>	T <sub>3</sub>	T <sub>4</sub>	T <sub>5</sub>	Т <sub>6</sub>	T <sub>1</sub>	1104
T <sub>12</sub>	T <sub>7</sub>	T <sub>8</sub>	Тэ	T <sub>10</sub>	T <sub>11</sub>	T <sub>12</sub>	T <sub>7</sub>	)
T <sub>18</sub>	T <sub>13</sub>	T <sub>14</sub>	T <sub>15</sub>	T <sub>16</sub>	T <sub>17</sub>	T <sub>18</sub>	T <sub>13</sub>	
T <sub>24</sub>	T <sub>19</sub>	T <sub>20</sub>	T <sub>21</sub>	T <sub>22</sub>	T <sub>23</sub>	T <sub>24</sub>	T <sub>19</sub>	
								•
1	2	3	4	5	6	1	2	
T <sub>4</sub>	T <sub>5</sub>	T <sub>6</sub>	T <sub>1</sub>	T <sub>2</sub>	T <sub>3</sub>	T <sub>4</sub>	T <sub>5</sub>	1106
T <sub>10</sub>	T <sub>11</sub>	T <sub>12</sub>	T <sub>7</sub>	T <sub>8</sub>	Tg	T <sub>10</sub>	T <sub>11</sub>	
T <sub>16</sub>	T <sub>17</sub>	T <sub>18</sub>	T <sub>13</sub>	T <sub>14</sub>	T <sub>15</sub>	T <sub>16</sub>	T <sub>17</sub>	
T <sub>22</sub>	T <sub>23</sub>	T <sub>24</sub>	T <sub>19</sub>	T <sub>20</sub>	T <sub>21</sub>	T <sub>22</sub>	T <sub>23</sub>	
	1 T <sub>1</sub> T <sub>7</sub> T <sub>13</sub> T <sub>19</sub> 1 T <sub>6</sub> T <sub>12</sub> T <sub>18</sub> T <sub>24</sub> 1 T <sub>4</sub> T <sub>10</sub> T <sub>16</sub>	1     2       T1     T2       T7     T8       T13     T14       T19     T20       1     2       T6     T1       T12     T7       T18     T13       T24     T19       1     2       T4     T5       T10     T11       T16     T17	1     2     3       T1     T2     T3       T7     T8     T9       T13     T14     T15       T19     T20     T21       1     2     3       T6     T1     T2       T12     T7     T8       T18     T13     T14       T24     T19     T20       1     2     3       T4     T5     T6       T10     T11     T12       T16     T17     T18	1     2     3     4       T1     T2     T3     T4       T7     T8     T9     T10       T13     T14     T15     T16       T19     T20     T21     T22       1     2     3     4       T6     T1     T2     T3       T12     T7     T8     T9       T18     T13     T14     T15       T24     T19     T20     T21       1     2     3     4       T4     T5     T6     T1       T10     T11     T12     T7       T16     T17     T18     T13	1     2     3     4     5       T1     T2     T3     T4     T5       T7     T8     T9     T10     T11       T13     T14     T15     T16     T17       T19     T20     T21     T22     T23       1     2     3     4     5       T6     T1     T2     T3     T4       T12     T7     T8     T9     T10       T18     T13     T14     T15     T16       T24     T19     T20     T21     T22       1     2     3     4     5       T4     T5     T6     T1     T2       T10     T11     T12     T7     T8       T10     T11     T12     T7     T8       T16     T17     T18     T13     T14	1     2     3     4     5     6       T1     T2     T3     T4     T5     T6       T7     T8     T9     T10     T11     T12       T13     T14     T15     T16     T17     T18       T19     T20     T21     T22     T23     T24       1     2     3     4     5     6       T6     T1     T2     T3     T4     T5       T12     T7     T8     T9     T10     T11       T18     T13     T14     T15     T16     T17       T24     T19     T20     T21     T22     T23       1     2     3     4     5     6       T4     T5     T6     T1     T2     T3       T10     T11     T12     T7     T8     T9       T10     T11     T12     T7     T8     T9       T16     T17     T18     T13     T14     T15	1     2     3     4     5     6     1       T1     T2     T3     T4     T5     T6     T1       T7     T8     T9     T10     T11     T12     T7       T13     T14     T15     T16     T17     T18     T13       T19     T20     T21     T22     T23     T24     T19       1     2     3     4     5     6     1       T6     T1     T2     T3     T4     T5     T6       T12     T7     T8     T9     T10     T11     T12       T18     T13     T14     T15     T16     T17     T18       T24     T19     T20     T21     T22     T23     T24       1     2     3     4     5     6     1       T4     T5     T6     T1     T2     T3     T4       T10     T11     T12     T7     T8     T9     T10       T16     T17     T18     T13     T14     T15     T16	T1         T2         T3         T4         T5         T6         T1         T2           T7         T8         T9         T10         T11         T12         T7         T8           T13         T14         T15         T16         T17         T18         T13         T14           T19         T20         T21         T22         T23         T24         T19         T20           1         2         3         4         5         6         1         2           T6         T1         T2         T3         T4         T5         T6         T1           T12         T7         T8         T9         T10         T11         T12         T7           T18         T13         T14         T15         T16         T17         T18         T13           T24         T19         T20         T21         T22         T23         T24         T19           1         2         3         4         5         6         1         2           T4         T5         T6         T1         T2         T3         T4         T5           T10         T11

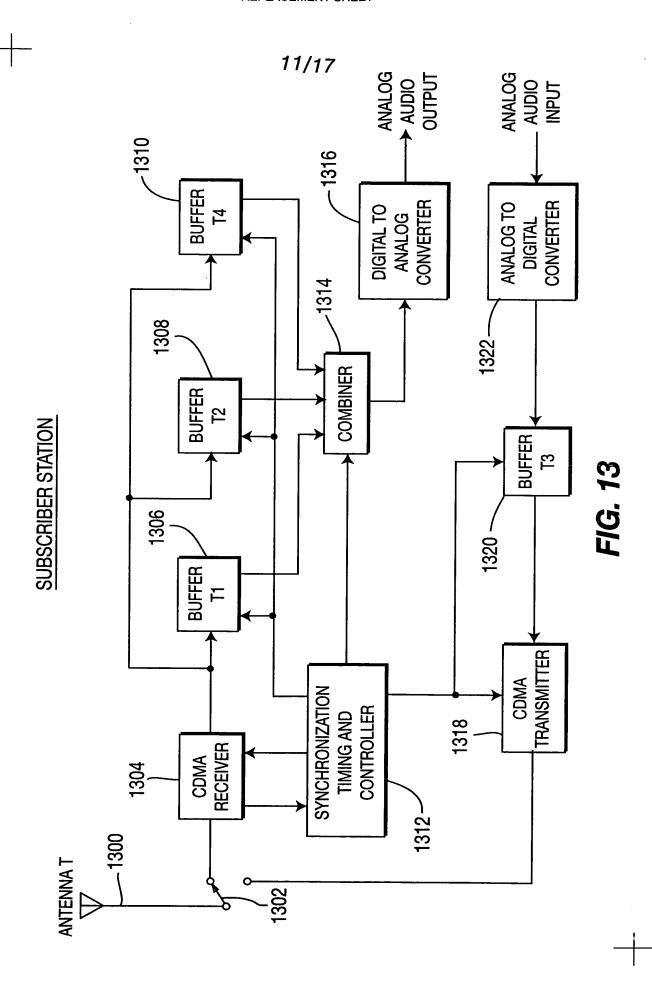
FIG. 11B

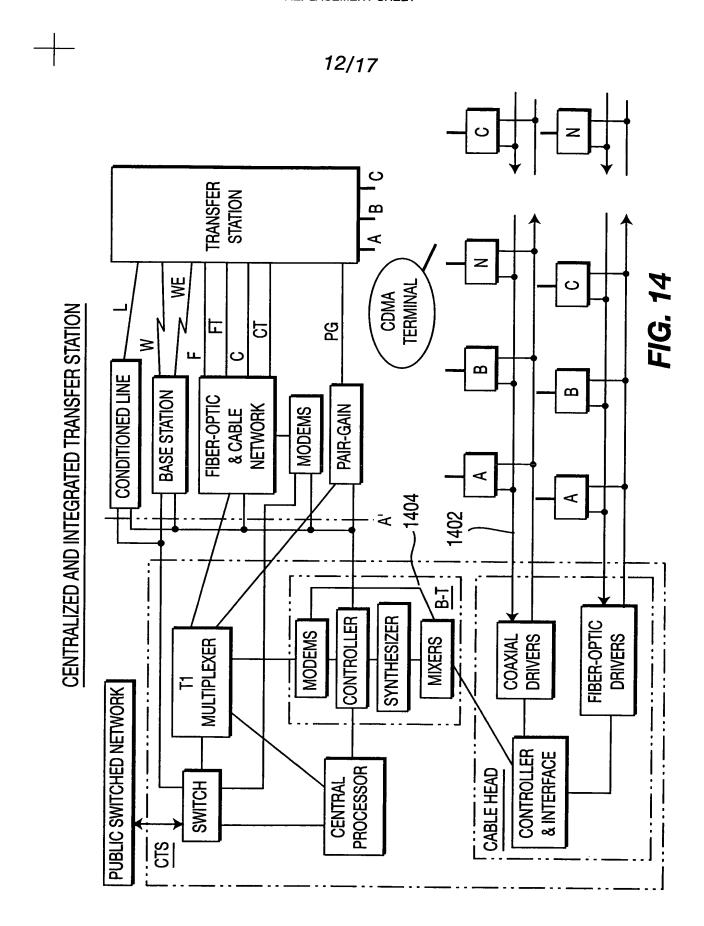
TRANSFER STATION CDMA INPUT FROM ANTENNAS (REVERSE CHANNEL)

ANTENNA A ANTENNA B AND ANTENNA C HAVE IDENTICAL TIME SLOTTING

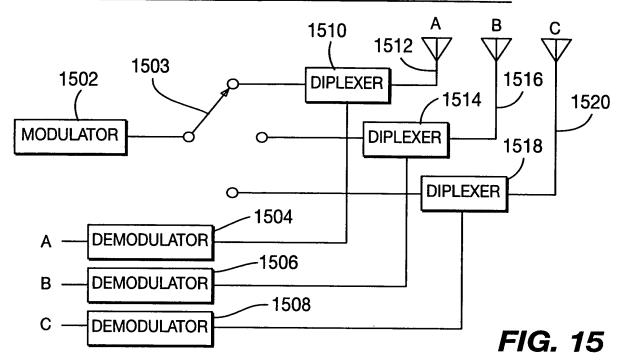
1	2	3	4	5	6	1	2	
R <sub>5</sub>	R <sub>6</sub>	R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	R <sub>4</sub>	R <sub>5</sub>	R <sub>6</sub>	1108
1	R <sub>12</sub>	R <sub>7</sub>	R <sub>8</sub>	R <sub>9</sub>	R <sub>10</sub>	R <sub>11</sub>	R <sub>12</sub>	
R <sub>17</sub>	R <sub>18</sub>	R <sub>13</sub>	R <sub>14</sub>	R <sub>15</sub>	R <sub>16</sub>	R <sub>17</sub>	R <sub>18</sub>	
R <sub>23</sub>	R <sub>24</sub>	R <sub>19</sub>	R <sub>20</sub>	R <sub>21</sub>	R <sub>22</sub>	R <sub>23</sub>	R <sub>24</sub>	



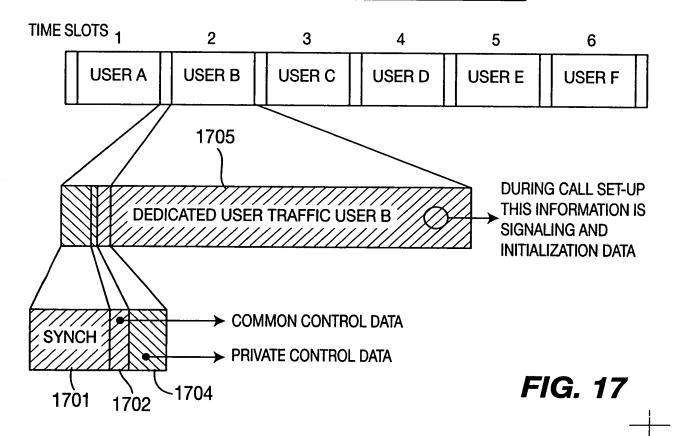




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TRANSFER STATION ANTENNA IMPLEMENTATION



### SYNCH AND CONTROL CHANNEL STRUCTURE



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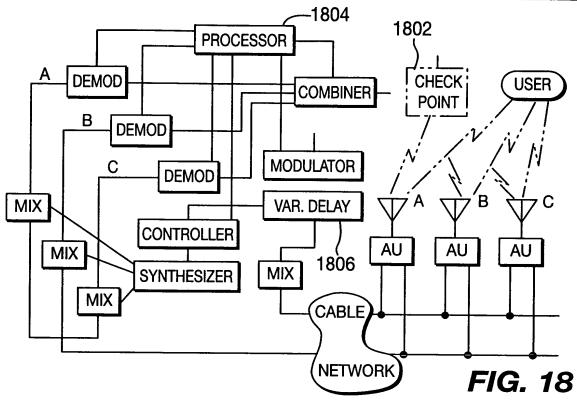
¥ 贸 DIPLEXER OSC DISTRIBUTED ANTENNA IMPLEMENTATION USING CABLE OR FIBER-OPTIC CABLE **TRANS** ¥ ¥ 照 Ω DIPLEXER ၁၀ **TRANS** ¥ ¥ 贸 DIPLEXER 080 TRANS Χ 1602 MODULATOR ¥ DEMODULATOR DEMODULATOR DEMODULATOR CONTROLLER **SYNTHESIZER** മ S ¥

¥

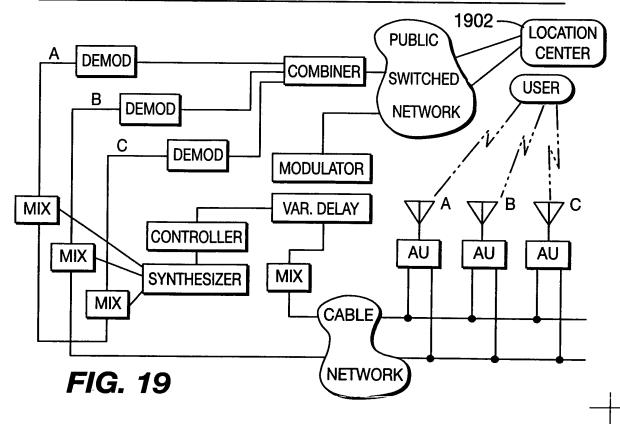
F/G. 16

**NETWORK**)

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TIME CALIBRATION FOR DISTRIBUTED ANTENNA IMPLEMENTATION



### LOCATION CENTER EXTERNAL TO COMMUNICATION SYSTEM



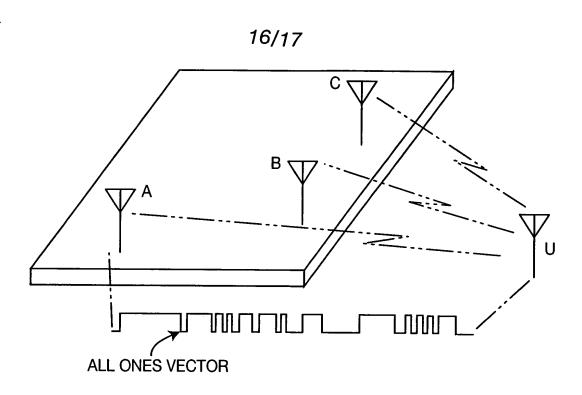


FIG. 20

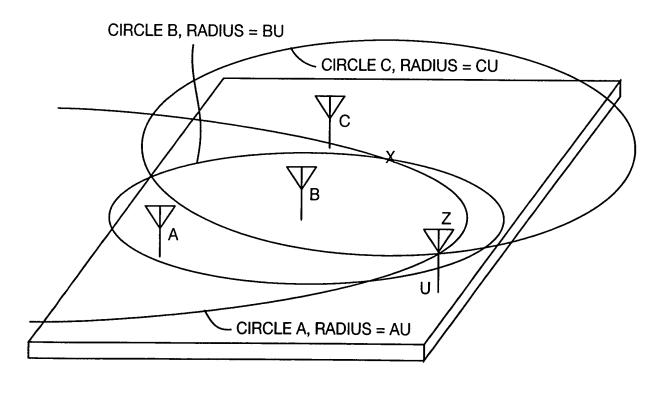


FIG. 21

